

Quality of life and its correlates in Central India

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Abstract:

Background: Perception about the health status of an individual is important for the Quality of life (QOL) and day-to-day productive functioning. Measuring health status in a population is important for the prediction of health and social care needs. Quality of life (QOL) studies are an essential complement to health evaluation.

Objectives: (1) To Assess QOL and its correlates in Bhind district of M.P using the 26 item WHOQOL instrument (WHOQOL-bref); (2) Study the relationship of QOL with Interpersonal trust and various Socio-demographic variables.

Methodology: A cross-section study on 505 subjects of the age group 20-45 years from Bhind district in central India was done. We studied the relationship between socio-demographic variables, interpersonal trust with each of four domains of the WHOQOL-BREF. Multivariate logistic regression model was constructed to find the correlates among them.

Results: Higher education is associated with most of the domains of QOL. Subjects with low interpersonal trust (OR= 1.839, C.I. 1.275-2.653, p-value<.005) are twice more likely to have poor environmental domain score. Being married (OR=.556, CI .344-.901, p-value <.005) and not Living in a joint family (OR=.581, CI .379-.891, p-value <.005) is associated with poor psychological health.

Conclusion: QOL proved to be a sensitive tool for measuring subjective well being. Higher education is the best predictor for good QOL. Semiskilled workers (farmers and labourers) should be prioritized as high risk groups for adverse life situations. Interpersonal trust has a significant impact on QOL. So, policies directed at rural population should target at specific needs of community.

Key Words: Central India, Interpersonal trust, Psychological health, Quality of life

Introduction:

Many a times the terms Quality of Life (QOL), subjective well being/well being, happiness, life satisfaction, good life are used synonymously, they do overlap conceptually [1]. However QOL is a multidimensional rather than unidirectional concept. It looks into many domains and facets that have an impact on lifestyle.

Every culture has different factors affecting QOL like in Japan interpersonal trust is significantly associated with

QOL [2.] Quality of life as a measure of health is therefore a broad concept and is concerned with whether disease or impairment limits a person's ability to accomplish a normal role (for example, whether the inability to climb stairs limits a person at work). However, the measures do not consider how people arrive at these judgments [3]. Rural well being assumes great importance in a predominantly rural country like India. Predicted self rated quality of life and perceived opportunity to

change act differently in rural setups. So we need to focus on how and why different types of cultural participation contribute to specific domains of quality of life.

Determinants for QOL:

Jude et al. in a study in Kuwait found that age was negatively correlated with all the domains QOL [4]. Most of the studies found that females had poor QOL as compared to their male counterparts. Males had significantly higher scores for physical functioning, leisure activity, vitality and health perception than women. Females had low vitality, negative perception on environmental domain, but were more satisfied with their family life than men and reported higher social domain score than males [5-9]. Almost everyone in previous studies found that those who were single reported better quality of life in most of the domains than married [4,5,10]. One study from India found that small families have more female literacy rates, high family planning adoption rates, less history of mortality in preceding year, better standard of living (good house, vehicle, TV, lack of debts) but were not happy regarding positive feeling towards life as compared to big families [11].

On broader aspects developing countries reported poorer environment, psychological and physical QOL than developed countries, although social QOL was found good with no difference with developed countries [12]. Farmers have been shown to have poorer physical and mental health than the general population as well as poor QOL in comparison to salary earners and entrepreneurs [13-15]. In Nepal dalits/non-dominant caste had lower physical functioning but high perception score for general health and social functioning as compared to castes with higher development indicators [6]. Studies in China found that in spite of economic gap, rural residents had a better health-related QOL than urban residents both physically and mentally but this finding contradicts a Lebanon based study where they found that habitat (rural or urban) has no significant influence on QOL [5,16,17]. Interpersonal trust is a very subjective measure and cannot be measured by looking at health, life

expectancy or income. As for example people in Japan, one of the richest countries; having high income equality; also with highest life expectancy in the world, have poor subjective well being or are 'the most unhappy' among the industrialized countries probably due to lack in interpersonal trust [3, 18-20].

Objectives and Methodology:

The specific objectives of the study were to (1) assess QOL and its correlates in Bhind district of M.P using the 26 item WHOQOL instrument (WHOQOL-bref); (2) Study the relationship of QOL with Interpersonal trust and various Socio-demographic variables. The research question was "How 'Quality of Life' varies across various parameters (like age, sex, socio-economic status, dominating community, location and occupation) in Bhind district of Madhya Pradesh?"

Subjects and setting:

This study was a community based cross sectional study conducted in the Chambal area of Madhya Pradesh (district Bhind) which is having agriculture as main occupation for most; the economic resources of the area are inadequate to support the population. Holdings are small. There is little irrigation and there are no subsidiary industries. Literacy level is low and majority of population (more than 70 percent) is living in rural areas. After estimation of sample, sampling plan was constructed based on the population proportion to size sampling in rural and urban areas of Bhind district of Madhya Pradesh. By population proportion to size sampling 15 villages out of 171 and 10 wards out of 69 (in three towns) were selected as clusters. In each cluster 22 households were selected (11 each in north and south direction) from the probable midpoint of the cluster. The data was collected from 01 July 2010 till 31 August 2010 without interruption. Along with data collection the data were entered in Epi-data version 3.1 and then imported to SPSS for windows version 17.0 for analysis purpose.

Operational definitions:

We accepted the WHO definition of QOL as ‘The individual’s perception of his or her position in life, with in the cultural context and value system he/she lives in, and in relation to his or her goals, expectations parameters and social relations. HRQOL (Health related quality of life) score was calculated as the mean score of global QOL score and health satisfaction score (first two questions of WHOQOL-BREF). This scoring was done using WHOQOL-Bref (validated in Hindi) user’s manual guidelines. [1, 22] Each domain enquires about few facets that are listed in Table1.

Interpersonal trust:

For measuring interpersonal trust, we utilized three commonly used items related to trust in people, human fairness and human nature. All items were presented on a five point Likert scale. Scores were summated for obtaining a composite score with adequate variability for analysis.

Ethical Consideration:

The study had obtained clearance from Technical Advisory Committee and Institute Ethical Committee of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala prior to data collection

Table 1: WHOQOL-BREF DOMAINS

Domain	Facets incorporated in the domains
Physical health	Activities of daily living, Dependence on medicinal substances and medical aids, Energy and fatigue, Mobility, Pain and discomfort, Sleep and rest, Work capacity
Psychological health	Bodily image and appearance, Negative feelings, Positive feelings, Self-esteem, Spirituality, religion and personal beliefs, Thinking, learning, memory and concentration
Social relationship	Personal relationship, Social support, Sexual activity
Environmental	Financial resources, Freedom, Physical safety and security, Health and social care: accessibility and quality, Home environment, Opportunities for acquiring new information and skills, Participation in and opportunities for recreation, Leisure activities, Physical environment(pollution, noise, traffic, climate), Transport

Results

General description of survey outcome:

We reported data for 505 subjects (84.8 percent). Out of the total sample (N=505), 58.4 percent were from rural and 41.6 were from urban location as sampling was done according to population proportion to size. (Table 3) The mean age of the sample population was 31.7 years (SD 7.7). The mean age for males was 31.80 (SD 7.6) which was little higher in comparison to females 31.54 (SD 7.8). For further analysis age was grouped into three categories as: 20-29 years, 30-39 years and 40-45 years for comparison with other nation’s data. Total number of family members varied from one to thirty five. By taking median value which was six, this variable was dichotomized in small family and large family.

Socioeconomic description of study subjects:

For analysis purpose farmers and labourers were clubbed as semiskilled, private job, business and government employee were clubbed as skilled and students, unemployed and others were clubbed as others. According to monthly expenditure per month (range 200-99999) sample was separated in quartiles. Quartile-1 correspond to lowest and quartile fourth to highest monthly expenditure per month. Type of floor was coded as (1=others, 2=mud, 3=cement, 4=tiles). For obtaining a socioeconomic variable (Socio-Economic Score, SES) the quartile score of monthly expenditure and codes for type of floor were added. The median of the computed SES was used to divide it into lower and higher SES. For analysis purpose it was clubbed

dominant (Jain and others).

Table2: Socio-demographic characteristics of the sample population

VARIABLES		Total n (%)	Rural n (%)	Urban n (%)
N (%)		505(100)	295(58.4)	210(41.6)
Gender (n=505)	Male	270(53.5)	176(59.7)	94(44.8)
	Female	235(46.5)	119(40.3)	116(55.2)
Age groups(n=505)	20-29	217(43.0)	127(43.1)	90(42.9)
	30-39	177(35.0)	98(33.2)	79(37.6)
	40-45	111(22.0)	70(23.7)	41(19.5)
Marital status (n=505)	Single	109(21.6)	59(20)	50(23.8)
	Married	381(75.4)	233(79)	148(70.5)
	Spouse died	13(2.6)	2(.7)	11(5.2)
	Divorced	1(.2)	0(0)	1(.5)
	Others	1(.2)	1(.3)	0(0)
Type of family(n=505)	Joint	344(68.1)	195(66.1)	149(71.0)
	Nuclear	146(28.9)	91(30.8)	55(26.1)
	Extended	15(3)	9(3.1)	6(2.9)
Family size(n=505)	Small family	255(50.5)	140(47.5)	115(54.8)
	Large family	250(49.5)	155(52.5)	95(45.2)
Education (n =505)	Uneducated	38(7.5)	28(9.5)	10(4.8)
	Primary(1-4yrs)	68(13.5)	51(17.3)	17(8.1)
	Sec(5-10yrs)	177(35.0)	124(42.0)	53(25.2)
	Higher	222(44.0)	92(31.2)	130(61.9)
Occupation (n=505)	Farmer	153(30.3)	119(40.3)	34(16.2)
	Labourer	62(12.3)	47(15.9)	15(7.1)
	Business	37(7.3)	3(1.0)	34(16.2)
	Govt. employ	30(5.9)	13(4.4)	17(8.1)
	Private job	39(7.7)	9(3.1)	30(14.3)
	Student	52(10.3)	28(9.5)	24(11.4)
	Housewife	103(20.4)	65(22.0)	38(18.1)
	Unemployed	18(3.6)	10(3.5)	8(3.8)

	Others	11(2.2)	1(.3)	10(4.8)
Caste (n=505)	Thakur	109(21.6)	68(23.0)	41(19.6)
	Brahmin	189(37.4)	140(47.5)	49(23.3)
	Jain	51(10.1)	1(.3)	50(23.8)
	Others	156(30.9)	86(29.2)	70(33.3)
Type of floor (n=505)	Cement	241(47.7)	119(40.3)	122(58.1)
	Mud	196(38.8)	158(53.6)	38(18.1)
	Tiles	49(9.7)	10(3.4)	39(18.6)
	Others	19(3.8)	8(2.7)	11(5.2)
Currently ill(n=505)	Yes	94(18.6)	43(14.6)	51(24.3)
	No	411(81.4)	252(85.4)	159(75.7)
Socio Economic Status (n=505)	Low	310(61.4)	221(71.3)	74(37.9)
	High	195(38.6)	89(28.7)	121(62.1)
Earning members (n=505)	One	335(66.3)	203(68.8)	132(62.9)
	More than one	170(33.7)	92(31.2)	78(37.1)

Interpersonal trust score description:

Majority of the sample chose the response 'disagree' to the statements made for capturing the levels of trust in people, trust in human nature and trust in human fairness (Table 3). For further analysis these variable were dichotomized into binary variables using median. Also a trust scale by summation of the coded value of each response of three questions on interpersonal trust was formed and dichotomized into a binary variable using the median. (Table 4)

For capturing community satisfaction for each facet of the WHOQOL-Bref we defined subject's satisfaction as the level of approval to particular life circumstance. The proportion of respondents who selected 'very good' or 'good' for each facet was observed. We quantified the community satisfaction with each item as at least 50

percent of subjects in the group responded to the question as 'good' or 'very good'. The criteria used for defining community satisfaction levels for each aspect were; dissatisfaction (less than 50 percent), bare satisfaction (50-65 percent), moderate satisfaction (66-74 percent) and highest satisfaction (>75 percent). This is simply a way of summarizing the table (Table 5).

We found that the subjects were mostly dissatisfied with most of the life circumstances as represented by various facets. No item figured in the highest satisfaction category. Moderate satisfaction is seen only with one facet where 72.9 percent subjects denied having negative feelings. In most of the facets (life circumstances) less than 50 percent subjects opted for good or very good response. The community as a whole is dissatisfied about these life circumstances.

Table 3: Response rates for each item in interpersonal trust scale

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Trust in people	59(11.7)	175(34.7)	124(24.6)	106(21.0)	41(8.0)
Trust in human nature	40(7.9)	140(27.8)	136(26.9)	138(27.3)	51(10.1)
Trust in human fairness	68(13.5)	189(37.4)	135(26.7)	72(14.3)	41(8.1)

Table 4: Summation trust score

Summation Trust	Total to n (%)	Rural n (%)	Urban n (%)
Low	256(50.7)	167(56.6)	89(42.4)
High	249(49.3)	128(43.4)	121(57.6)

Table 5: Level of community satisfaction for various QOL facets: WHOQOL-Bref

Level of community satisfaction	Facet name (the proportion of respondents who selected 'very good' or 'good' for each facet)
Highest satisfaction (75%)	
Moderate satisfaction (66-74%)	Negative feelings (72.9%)
Bare satisfaction (50-65%)	Self satisfaction (53.9%); Personal Relations (53.4%); Need for medical treatment (58%); Work capacity (50.9%); Satisfaction with sex (59.2%); Physical pain prevents activities (54.3%);
Dissatisfied (<50%)	Over all QOL(37.6%); ability to get around (24.1%); living place (45%); transport (33.3%); Health satisfaction (46.6%); enjoy life (36.8%);Life meaningful (34.4%); Feeling safe(37%); environment (32.9%); Energy (35.8%); Bodily appearance (49.5%); Money (17.1%); satisfaction with sleep(46.8%); Activities of daily living(43.8%); Support from friends (40.8%);Ability to concentrate (33.3%); Information available for daily needs(17.9%); Leisure activities opportunity(18.2%); Access to health service(31.3%).

All the predictor variables were cross tabulated with all four domains of QOL and HRQOL. Variables which were significant in bivariate analysis and also some variable which the researcher thought to be useful were analyzed with

Multivariate logistic regression analysis. Table-7 shows the final model after multi-variate analysis for each QOL domains and HRQOL.

Table 6: Distribution of QOL domain scores across various socio-demographic variables

DOMAINS		Physical		Psycho logical		Social relation		Environ mental		HRQOL	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Location	Rural	49.04	12.3	50.67	14.2	61.01	19.5	44.76	15.0	68.10	16.0
	Urban	48.14	14.0	52.30	14.5	62.53	19.5	49.86	18.3	63.10	18.1
Gender	Male	48.05	13.2	51.49	15.3	62.09	21.3	45.08	15.6	67.81	17.5
	Female	49.37	12.8	51.18	13.2	61.13	17.3	48.96	17.5	64.63	16.3
Age groups	20-29	48.46	13.9	51.84	14.6	63.17	20.4	45.98	16.0	67.14	16.6
	30-39	47.92	11.9	49.69	13.7	60.26	17.6	46.11	15.3	63.84	18.1
	40-45	50.25	13.0	53.04	14.7	60.88	20.6	49.88	19.4	68.74	15.6
Marital status	Single	49.10	15.6	53.83	15.3	56.31	21.9	48.89	17.2	68.63	16.4
	Married	48.52	12.1	50.54	14.0	63.38	18.4	46.23	16.4	65.59	17.1
Type of family	Joint	49.06	13.2	52.45	14.8	62.28	19.7	47.71	17.0	65.96	17.7
	others	47.82	12.7	48.99	13.1	60.30	19.2	45.12	15.6	67.14	67.1
Family size	<6	48.86	12.4	51.25	14.2	62.09	19.6	47.94	16.7	66.62	16.4
	>6	48.47	13.6	51.45	14.6	61.20	19.4	48.81	16.6	66.04	17.6
Currently ill	Yes	47.37	14.9	50.62	15.2	59.75	20.3	43.05	17.1	61.38	15.9
	No	48.96	12.6	51.52	14.1	62.08	19.3	47.76	16.4	67.46	17.1
Education	Uneducated	42.19	16.0	45.61	15.5	57.89	20.8	45.23	18.1	54.73	21.1
	Pri(1-4yrs)	50.94	12.1	52.20	13.3	58.94	17.8	46.69	16.1	64.11	16.9
	Sec(5-10yr)	46.53	12.4	48.28	13.0	59.46	19.1	43.48	13.9	64.74	15.7
	Higher	50.78	13.0	54.52	14.7	64.86	19.8	49.94	18.0	70.27	16.1
Occupation	Semiskilled	47.22	11.9	48.75	14.2	60.65	20.6	43.66	14.6	63.72	18.0
	Skilled	51.21	12.1	56.68	14.6	64.15	19.0	52.91	17.7	68.11	16.5
	Others	50.17	16.4	53.08	13.4	60.18	20.7	50.88	17.6	71.23	15.1
	Housewife	47.88	12.9	49.91	13.5	62.29	16.7	44.26	16.5	66.12	16.5
Caste	Dominant	49.14	13.2	52.60	14.1	62.69	19.4	47.23	17.2	67.62	16.9
	Non -Dominant	47.98	12.7	49.55	14.5	60.14	19.7	46.39	15.9	64.49	17.0
Earning members	One	48.30	12.8	50.72	14.0	61.51	19.0	46.06	15.7	65.61	17.2
	> One	49.39	13.5	52.59	15.0	61.91	20.6	48.51	18.3	67.76	16.5
SES	Low	47.75	12.7	49.51	14.2	59.91	19.9	44.24	14.3	65.55	17.3
	High	50.12	13.4	54.27	14.0	64.40	18.5	51.08	19.1	67.59	16.6
Trust	Low	48.32	12.7	50.39	14.5	61.81	18.5	43.95	15.7	66.95	17.1
	High	49.02	13.4	52.34	14.2	61.47	20.6	49.89	17.0	65.70	16.9

Table 7: Final models after multivariate logistic regression analysis for all domains

		Unadjusted odds	Adjusted odds	95% C.I.		p-value
Physical health domain	Higher education	.303	.535	.361	.792	.002
	Student, unemployed, others	.458	.551	.337	.902	.018
Psychological health domain	Higher education	.432	.662	.441	.996	.048
	Marital status(referent- single)	.693	.556	.344	.901	.017
	Type of family (referent-joint family)	.675	.581	.379	.891	.013
Social relation domain	Higher education	.460	.416	.284	.607	<.001
Environmental domain	Socioeconomic score	2.032	2.07	1.42	3.03	.000
	Interpersonal Trust	1.833	1.83	1.27	2.65	.001
HRQOL	Location	.627	.509	.333	.778	.002
	Higher education	.331	.442	.293	.666	<.001
	Current sickness	2.60	2.36	1.33	4.18	.002

Predictors of QOL:

In multiple regression analysis the most important predictor of scores of all domains of QOL is higher education. Higher education is associated with most of the domains of QOL. Subjects with low interpersonal trust (OR= 1.839, C.I. 1.275-2.653, p-value<.005) are twice more likely to have poor environmental domain score. Being married (OR=.556, CI .344-.901, p-value <.005) and not Living in a joint family (OR=.581, CI .379-.891, p-value <.005) is associated with poor psychological health than their counterparts.

Discussion:

All the domain scores were lower when compared across age groups, gender, location and overall mean with studies done in Japan and Kuwait [3,4]. Our QOL domains

scores shows highest mean score for HRQOL (mean of general health facet and QOL) and least for environmental domain and this is consistent with other international reports. The levels of community satisfaction for each life circumstances were found to be very poor as 19 out of 26 facets scores fall in 'Dissatisfied' category as compared to a study done in Kuwait where only six factors were in 'dissatisfied' category [4]. Only six turn out to be in bare satisfaction category, one in moderate satisfaction and not even a single one in highest satisfaction category. Less than one fifth of the sample were found to be satisfied with money, leisure activities opportunities and information available for daily needs. Hence an issue of concern is to understand the reasons for being unsatisfied in these life circumstances both individually and also with societal prospective.

Sample characteristics

Age group 40-45 scored highest mean score for all domains except social relationship where age group 20-29 scored the highest mean score. Males were found to score higher in social, psychological domains, general QOL facet and health satisfaction than females, this may be due to patriarchal nature of the society. However, QOL being a perceived state, this finding may be considered as some awakening of women towards the disparities experienced by them. Higher score of females in environmental domain can be explained by their less exposure to 'out of home' environment and more sense of physical safety and security. When compared across marital status those living as single scored higher than married in all the domains except the social relationship. This association was found to be significant with psychological domain of QOL in bi-variate analysis and this relationship remained significant in multivariate analysis too. The reason behind this may be the increased work load and responsibilities in married to look after their families and earn more. Usually married people get more social support, have well maintained personal relationship and satisfied with sexual activities. These may be reason for them to score higher in social relationship domain [6,7,10]. Our study found that subjects living in joint family scored higher in all domains as compared to nuclear and extended. This relationship was found significant in bi-variate analysis with psychological domain of QOL.

As observed in previous studies our study also found the positive correlation between SES and all domains of QOL [9,10,22]. But this association was not found true with environmental domain of QOL where we found a significant negative correlation. This can be explained because subjects with low SES in this community may feel more secure and safe and enjoys better physical environment (pollution, noise, traffic, and climate) than high SES group. Education play a major role in predicting QOL as the uneducated scored least in all the domains and the higher education group scored the highest (in physical domain the values for primary education and higher education were nearly equal), and this relationship was significant for all domains of QOL (except environmental) and this relationship remained so after multivariate analysis. These findings were concurrent with other studies [3,5,13,14].

Like previous studies our study also found that among various occupation groups farmers and labourers were found to be the most vulnerable and scored lowest in all the domains of QOL [15,23,24]. Subjects of dominants caste scored higher in all domain, this finding contradicts a study from Nepal where they found that dalits/non-dominants have high perception score for general health and social functioning. This may be attributed to the differences in the caste perceptions and practices between the two areas. Rural people enjoy more physical health, environmental conditions and have better perception for overall QOL and health satisfaction but had poor psychological health and social relationship as compared to urban people. These findings were in the line of previous studies [5,13,14]. As in previous studies people with current illness had reported low in all the domains of QOL and this association was significant with HRQOL scores also [25-27].

Interpersonal trust

Subjects with high interpersonal trust summation score found to scored higher in all the domains of QOL as compared to those with low scores in interpersonal trust summation. This association was found to be very significant with environmental domain in bi-variate analysis and remained there in multivariate analysis also. These finding were similar to various other studies [10, 18-20].

Strengths and limitations of the study:

To our knowledge no authentic studies have been undertaken assessing the relationship QOL and its correlates in the context of interpersonal trust and exposure to firearm in India. Also the tool used is locally validated in Hindi. The study effectively covered urban and rural areas in a generally difficult area of the country. Since it was a self administered questionnaire survey, the credibility of the answers may be questioned. There was no way of ascertaining if the subjects truthfully answered the questions. Age group chosen was 20-45 years. Limited ability to compare with other data and lack some useful information. Telescoping might have played a role in the reporting, as the recall period was two weeks.

Conclusion:

This study shows that higher education is significantly associated with most of the domains of QOL (psychological health, physical health, HRQOL, Social relationship). Most of the rural population was semiskilled labourers (farmers and labourers). Lower education and earning resources is making them more vulnerable for living in a poor QOL. Rural habitants are more vulnerable for psychosocial problems, from public health point of view, rural habitants should be considered separate from others and

Key points

- **Higher education is significantly and positively associated with all domains of QOL.**
- **Low interpersonal trust has a significant negative impact on Quality of life.**

specific health programs targeting them should be considered. To our knowledge, our study is the first in developing countries to show the association between socio-demographic variables and interpersonal trust with QOL. Instead of asking 'why this individual has poor QOL?' we should ask 'why does this population have this level of poor QOL. In the classic work of Rose he showed the society is consistently responsible for most intimate of individual acts society. Individuals may come and go, but society rates remain constant and hence no matter how many counselling hotlines for some particular problem we might set up, the rates will not change until we change society. [28] We found that QOL is good and effective way to understand the daily life problems of general population. Although it may be difficult to improve the factors on which QOL resides, there are potential measures to enhance QOL in communities.

In a predominantly rural country like India, the indicators of well being are likely to be very different from other developed countries. There is a need to measure those factors to the maximal extent possible and direct policies according to them. For that purpose QOL studies in rural India are indispensable. An important outcome of the quality of life studies is its implications on policy decisions and implementation. For that purpose, we need to focus on how

and why different types of cultural participation contribute to specific domains of quality of life.

With urbanization, globalization, increased wealth and prosperity, the concept of QOL will also change, leading to further life satisfaction and higher demands. There is a need to carry out quality of life studies on a continuing and regular basis for the purpose of tracking the trend and direction. Improving quality of life is a public health priority of United States, one of the seven shared priorities of the England central and local government, while in Scotland it is one of the overarching objectives. So there is a need of a national QOL index in India also, that systematically and periodically assesses the QOL and change in them with particular intervention. For that purpose this study may prove as a landmark.

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Date of Submission:	21-06-2013
Date of Peer Review:	22-06-2013
Date of Acceptance:	28-06-2013
Date of Publication:	30-06-2013